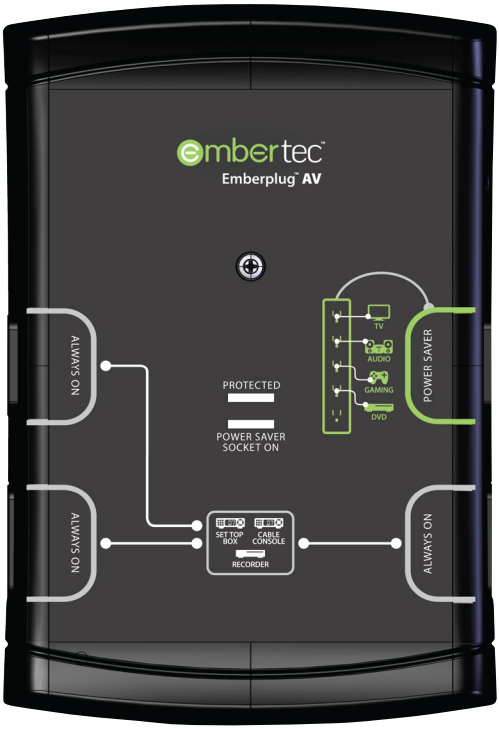
ENERGY EFFICIENCY TECHNOLOGIES



EMPOWERED

Embertec Emberplug™ AV

Automatic Powerdown

EPUSAV-ET-01

Instruction Booklet

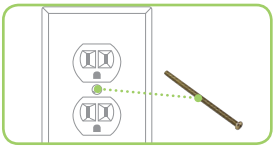
PATENTS GRANTED AND PATENTS PENDING

Quick Installation Guide

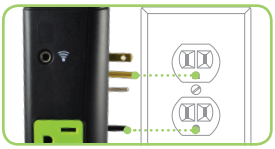
Your Embertec Emberplug™ can simply be plugged into the wall outlet, or it can be plugged in and attached with a screw.

Step by step Instructions on how to install the unit with the screw

The Emertec Emberplug does not require fastening to the wall with the supplied screw, but for the best secure fit read the following instructions.



Step 1 – Remove the screw from the outlet face plate. Retain original screw in case you remove the Embertec Emberplug.

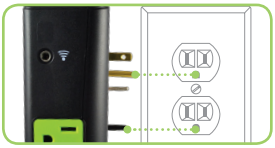


Step 2 – Plug the Embertec Emberplug into the wall outlet.

Step 3 – The new screw is already inserted in the Embertec Emberplug, use a screwdriver to tighten the screw which will secure the Embertec Emberplug to the wall outlet.

Step by step Instructions on how to install the unit without the screw

Step 1 – Remove the center screw from the Embertec Emberplug. Retain the screw in case you need it for another installation.



Step 2 – Plug the Embertec Emberplug into the wall outlet.

Quick Connection Guide

Setting Up the Embertec Emberplug™ AV

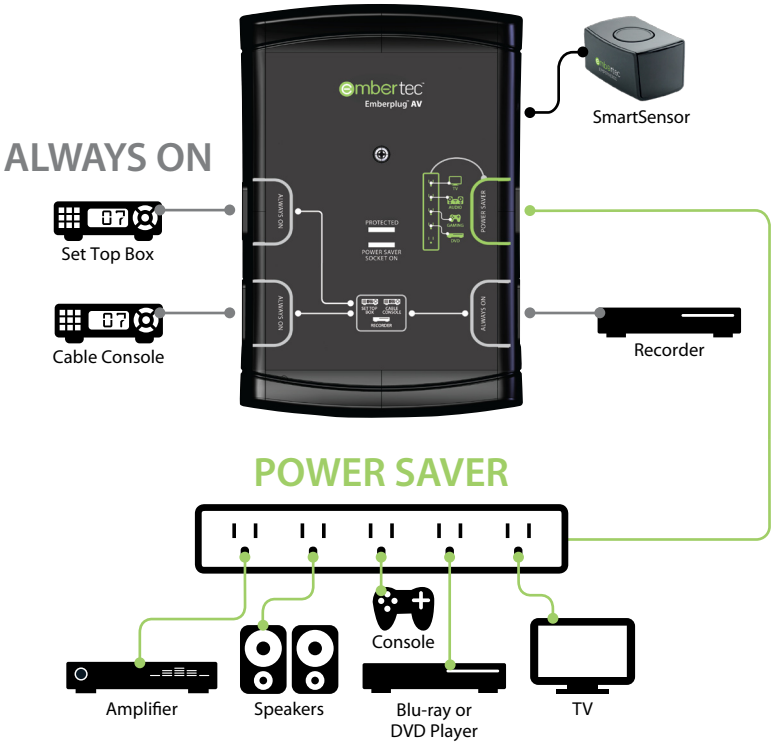
1. Unplug your existing powerstrip and then plug it into the 'Power Saver' socket.
2. Plug AV equipment that can automatically be switched off into the powerstrip.
3. Identify equipment that requires constant power for cool down period, timers, program guides and recording features, and plug into the socket marked 'Always On', or into another wall socket. A powerstrip may also be plugged into the 'Always On' socket.
4. Connect the supplied SmartSensor cable to the side of the Embertec Emberplug™ AV. Ensure this is plugged in firmly.
5. Place the SmartSensor in a convenient location that is in line of sight. Close to your television is the best position, and within normal operation of your existing remote control(s).
6. Plug the Embertec Emberplug™ AV into a 110V or 120V power point.
7. Power is now applied to the 'Power Saver' socket. The LED monitoring light on the Embertec Emberplug™ AV will light up for 3 seconds. This also indicates that the Embertec Emberplug™ AV has performed a load check.

Important

Please retain your instruction book for future use.

In the event that you need assistance with your Embertec Emberplug™, please contact us on 831-708-2621 or email us at customerservice@embertec.us Alternatively, visit us on our website at www.embertec.us

NOTE: Other appliances such as lamps, chargers etc, may be plugged into the 'Always On' sockets if needed, or with the 'Power Saver' if only needed when your AV system is being used.

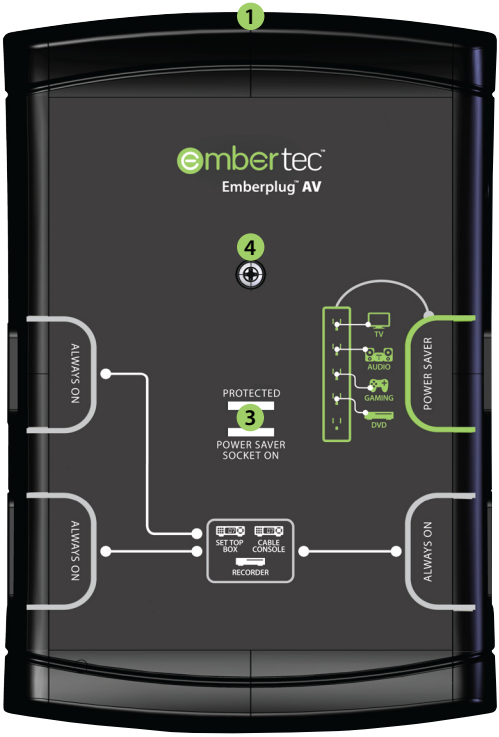


Contents

Quick Installation Guide	p2
Quick Connection Guide	p3
What you need to know	p8
What is MusicMode™	p13
Fast Facts	p14
Embertec Emberplug™ Specifications	p15
Troubleshooting Guide	p16
Warranty	p17

Your Embertec Emberplug™ AV

1. Embertec Emberplug™ AV
2. SmartSensor
3. On/Off 'Power Saver' socket indicator light
4. Wall Screw – in socket



- The ‘Always On’ sockets (black) are recommended for use with Audio Visual (AV) equipment that requires constant power for timers, program guide and recording features (e.g. DVR, PVR, VCR, Cable, Digital TV Receivers, hard drives or bedside alarms). This will ensure constant power is not interrupted to these devices.
- The ‘Power Saver’ socket (green) is recommended for Audio Visual (AV) equipment that can be automatically switched off (e.g. Televisions, amplifiers, stereos, speakers, game consoles, DVDs, CDs, Blu-ray players, lamps). Connect these with your existing powerstrip.
- The LED monitoring light indicates that power is available at the 'Power Saver' socket of the Embertec Emberplug™ AV.
- Overload protection circuit breaker re-set button (on bottom of device, not shown).
- 3 pins for use with standard North American wall sockets.
- Infrared SmartSensor activates the ‘Power Saver’ socket, monitors activity and is also used to set the Active Powerdown. Comes with a 3 meter/9ft cable, LED light and integrated push button control.
- The 'Protected' light should be on. If this light turns off or is dim, you may have a ground-wiring problem in your home and you should contact an electrician to properly ground the outlet.
- The 'Power Saver Socket On' light shows the state of the 'Power Saver' socket. When the light is on, the 'Power Saver' socket is powered; if the light is off, the 'Power Saver' socket is not powered.

What you need to know!

Please read this Instruction Booklet before installing your Embertec Emberplug™ AV.

- The Embertec Emberplug™ AV is an electrical device. Normal safety precautions for use of an electrical device must be observed.
- Do not immerse the Embertec Emberplug™ AV in water.
- Needles, knives or any other metal or conductive item must not be inserted into any Embertec Emberplug™ AV outlet.
- This device does not convert voltage. It must only be used with appliances fitted with North American configuration electrical plug (2-pin, or 3-pin) and rated 110–120V AC.
- Ensure the Embertec Emberplug™ AV is securely plugged into the wall socket to avoid it slipping out. Ensure cords plugged into the Embertec Emberplug™ AV remain tangle free.
- It is recommended to regularly inspect the Embertec Emberplug™ AV for damage. The Embertec Emberplug™ AV must not be used if it shows any signs of damage.
- This Embertec Emberplug™ AV is for indoor household use. Do not use outdoors. Do not use this Embertec Emberplug™ AV for anything other than its intended use. Misuse may cause injury.
- Except as required by law, Embertec is not responsible for special, incidental, or consequential damages, or loss of data; or any loss or damage arising from intentional misuse of the product. Such damages and loss include, but are not limited to: lost business; business downtime; component/equipment replacement and reconfiguration; and the costs of retrieval of lost data.
- In normal use, this device intermittently emits a green flashing light. People who experience photosensitive epilepsy or other forms of photosensitivity should exercise caution when using the device.

We recommend connecting any home theater media center computers, or appliances containing a hard drive into the 'Always On' socket. We recommend connecting home theater projection equipment which require a cool down period to the 'Always On' socket. This will prevent damage to, and extend the life of your home theater projection lamps.

The Embertec Emberplug™ AV has 2 power saving functions

1. Standby Powerdown automatically detects and saves power wasted when equipment is left in standby mode, by switching the power off to the equipment.

2. Active Powerdown automatically switches the power off to Audio Visual (AV) equipment connected to the 'Power Saver' socket after 1 hour, if it has not detected any remote control use.

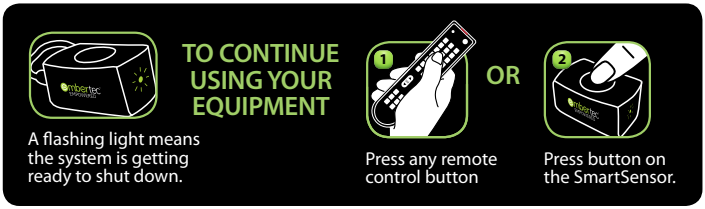
NOTE: The Embertec Emberplug™ AV is programmable and has an Active Powerdown default setting of 1 hour, which can be permanently set to 2 or 3 hours, or temporarily 8 hours (MusicMode™).

When will Active Powerdown Switch the Audio Visual (AV) Equipment off?

- If your Embertec Emberplug™ AV detects that your Audio Visual (AV) equipment is on but has not been used for a period of 1, 2, 3 or 8 hours (depending on your settings), the LED light on the SmartSensor will flash for approximately 10 minutes to warn you that power down is imminent.

To continue using your equipment.

- Simply press ANY button on ANY of your existing remote controls or press the button on the SmartSensor once. This will cancel the Active Powerdown and reset the timer to 1, 2, 3 or 8 hours (according to your setting).


TO CONTINUE USING YOUR EQUIPMENT
A flashing light means the system is getting ready to shut down.
1
OR
2
Press any remote control button
Press button on the SmartSensor.

NOTE: A flashing LED always means that your system will shut down completely in a while. Press any remote control button to stop the light flashing and continue using your system.

What Audio Visual Equipment Can Be Used With The Embertec Emberplug™ AV?

Embertec Emberplug™ AV is a power saving device that is suitable for all Audio Visual (AV) applications and setups, including:

Always On socket

- Audio Visual (AV) equipment that requires constant power for timers, program guides and recording features, such as DVD recorders, pay TV and PVR units, set-top boxes, hard drives or digital receivers
- Certain home theater projectors that require a cool down period, including rear projection televisions

Power Saver socket – will be automatically switched off

- Televisions without in-built hard drives
- Home theater speaker systems
- Game consoles without hard drives
- CD, DVD, and Blu-ray players
- Amplifiers
- Lamps

Turning ON your AV Equipment

- To operate your Audio Visual (AV) components, press any button on any existing remote control(s), or press the button on the SmartSensor. This will apply power to all components and place them in standby mode, ready for use. You can continue using your existing remote(s) to operate your television or other Audio Visual (AV) components in the normal way.

NOTE: To reactivate your TV components, you may be required to press the power button again on the relevant remote control after power has been restored.

Turning OFF your AV Equipment

- Simply turn your equipment off in the normal way. Once the Audio Visual (AV) components have been switched off, the Embertec Emberplug™ AV will remove power from the Power Saver socket after a delay of approximately 1 minute.

NOTE: The LED light on the SmartSensor will flash for about 60 seconds to warn you that power is about to be removed from the AV 'Power Saver' socket.

SmartSensor

The SmartSensor receives signals from any of your remote controls and recognises when you are interacting with your Audio Visual (AV) components. The SmartSensor is also used to get the time period for the Active Powerdown feature. SmartSensor default setting for Active Powerdown is 60 minutes.

Changing settings for Active Powerdown using the SmartSensor

Your Embertec Emberplug™ is equipped with a number of settings to suit your lifestyle. You can set your timer to either 1, 2 or 3 hours, depending on usage habits. This means the SmartSensor will flash after the set period, warning of imminent power down. In every case you can continue using your equipment by pressing any button on any remote control.

The default setting is 1 hour, which is aimed to maximise your energy savings.

Follow these instructions to change Active Powerdown to 2 or 3 hours, (this may be appropriate for longer movies or programs where remote control activity is less frequent).

1. Ensure your Audio Visual (AV) equipment is switched on.

2. Press and hold down the button on the SmartSensor firmly for 3 seconds, then release. The LED light on the SmartSensor will flash for a few seconds as it enters Settings Mode.

3. As soon as the LED light on the SmartSensor has stopped flashing, immediately begin to set the Active Powerdown to 2 or 3 hours, by pressing and releasing the SmartSensor button, as per the table below.

To set the Active Powerdown timer to:	Press the button on the SmartSensor:	To confirm the setting, the LED light on the SmartSensor will flash:
1 hour (default setting)	Once, then release	1 time
2 hours	Twice	2 times
3 hours	Three Times	3 times
Please make sure the sensor has flashed back 1, 2 or 3 times		

What is MusicMode™?

Your Embertec Emberplug™ AV is equipped with a unique MusicMode™ feature. This feature enables you to override the Active Powerdown for a period of 8 hours. This feature is great for playing music, parties, video nights or any time you want to keep your appliances on for an extended period of time.

The Embertec Emberplug™ AV will revert to its previous setting of 1, 2 or 3 hours after the 8 hour period or after a power down has occurred.

Activating MusicMode™ is easy:

Hold the button on your SmartSensor down for at least 8 seconds, then release. The LED will flash 5 times indicating that MusicMode™ is active.

Remember

1. In this mode your system will stay on for 8 hours, unless you switch your appliances off.
2. Your permanent Active Powerdown timer setting will revert to 1, 2 or 3 hours once you have switched your appliances off, or after 8 hours, **whichever comes first**.

NOTE: Make sure your AV System is on before you start!

Fast Facts

Specifications

- Surge protection is provided to all outlets.
- Conforms with UL1449-3

What Power is Wasted?

Many of today's appliances for the home and office continue to use power, even when the appliance is turned off. Appliances that are left on unintentionally waste even more power.

Overload Protection

The Embertec Emberplug™ AV is fitted with a safety device that removes power in the event of overloading. Should this occur, turn off and unplug all units, and press the reset button. Then plug into the wall socket again. Once reset, use any remote control to activate power to the Power Saver socket. Connect one device at a time. If any of the devices cause the safety device to trip again then get the offending device serviced. If the Embertec Emberplug™ AV fails to operate, please contact Embertec on 831-708-2621.

Care and Maintenance

To clean the outside of the Embertec Emberplug™ AV device, first remove the device from the power point. Then wipe the exterior with a soft cloth. Never use an abrasive cleaner, or water.

Disposal/Recycling

To protect the environment, the Embertec Emberplug™ AV should be recycled, or disposed of safely at the end of its life. Please return to a recycling centre for safe recycling or disposal.

Embertec Emberplug™ Specifications

At October 2012

Physical	**AV = Audio Visual (Product Code: EPUSAV-ET-01)**
Dimensions:	130.85mm W x 191.70mm H x 53.28mm D (5.15in W x 7.55in H x 2.10in D)
Weight:	530g (1.17 lbs) 60g (0.13 lbs) SmartSensor
Colour:	Black body, black and green inserts
SmartSensor Cable Length:	3 meters (9.84 ft)
Number of Outlets: 4	Always On: 3 Power Saver: 1
Environmental	
Temperature (operating):	0 ^{0}C to +70 ^{0}C (32 ^{0}F to + 158 ^{0}F)
Temperature (storage):	-20 ^{0}C to +85 ^{0}C (-4 ^{0}F to +185 ^{0}F)
Humidity (operating):	95% RH at +50 ^{0}C (122^{0}F)
Protection	
Surge Compliance:	In accordance with UL1449-3
Total Surge:	1,008 Joules / 30,000 Amps
Input Current:	15A RMS via circuit breaker
Over-Current Threshold:	15A RMS
Electrical Durability	
Relay endurance:	Over 100,000 switching cycles
Operating Voltage:	120V AC +-5%
Output Current:	15Amps RMS
Max total load:	1800 W
Life Span:	> 20 years
Maximum Power consumption	< 1 W @ 120V 50Hz/60Hz
Control	
EmberSensor Push Button and Infrared Interface (AV Series Only)	

Troubleshooting Guide

Problem	To Check
The Embertec Emberplug™ AV is not receiving power.	• The protected light is on.
The Embertec Emberplug™ AV is not powering down my equipment in standby mode.	• Ensure the equipment is plugged into the 'Power Saver' socket, not into the 'Always On' socket. • The Embertec Emberplug™ AV has not detected the equipment is in standby. Please repeat this process by switching on the Audio Visual (AV) component again, waiting 10 seconds, and switching off again making sure all appliances are in standby mode.
The SmartSensor flashes frequently during normal operation.	• This may be an indication of unwanted infrared activity in the area. Please check the immediate area for infrared devices that maybe interfering with the Embertec Emberplug™ AV, such as compact fluorescent lights, computers, mobile phones, and other portable consumer electronic devices and: • Move the SmartSensor to another location that is within line of sight and normal operation range of your Audio Visual (AV) equipment remote controls.
The LED on the main body of the Embertec Emberplug™ AV is flashing, but my SmartSensor LED does not work (when plugged in and powered on).	• Please check your SmartSensor connection to the Embertec Emberplug™ AV by: • Ensuring the SmartSensor cable is safely and securely connected to the side of the Embertec Emberplug™ AV, and; • Press the button on the top of the SmartSensor when plugged into the Embertec Emberplug™ AV with the Embertec Emberplug™ AV switched on. If the LED does not flash whenever you press the button, it may be evidence of a faulty SmartSensor or connection.
The Embertec Emberplug™ AV has stopped working.	• Unplug all the appliances connected into the Embertec Emberplug™ AV adaptor and then unplug from the wall socket. Then reconnect everything again.
The TV keeps turning off after 1 hour.	• The SmartSensor default setting for Active Powerdown is 60 minutes. • Please see **"Changing SmartSensor setting for Active Powerdown"** to change Active Powerdown to 1, 2 or 3 hours.

Limited Warranties

Our Embertec Emberplug™ is designed and manufactured with precision and care, which is why we offer a Limited Product Warranty and a Limited $20,000 Connected Equipment Warranty for each Embertec Emberplug.

LIMITED PRODUCT WARRANTY

What is covered? Except as limited here, this product warranty covers any defect in material or workmanship with the Embertec Emberplug. If the initial purchase is by a utility or other entity that will not itself be using the device, this warranty is transferable to any customer of such entity who subsequently owns the device. Otherwise, this warranty is not transferable.

For how long? This warranty runs for one year from the date of purchase of the Embertec Emberplug.

What will we do if the device fails during the limited product warranty period and this warranty applies? Subject to the limitations set forth in this warranty, we will elect (at our option) to either repair or replace the defective device. If we elect to replace the device and it has been discontinued, we will replace it with another device of equal or greater value. We will ship the repaired or replacement device to you, and pay for those shipping costs.

What does this limited product warranty not cover? This warranty does not cover any damage to the Embertec Emberplug caused by improper use, accidents, acts of God (such as lightning strikes, floods or earthquakes), or normal wear and tear. For purposes of this warranty, "improper use" means not installing or operating the device in accordance with the manual. Any incidental, consequential, special or other indirect damages are not recoverable under this warranty. Some states do not allow the exclusion of incidental or consequential damages, so the foregoing limitation may not apply to you. You will be responsible for any shipping or other transportation costs incurred in connection with returning the defective product to us.

How do you request service under this limited product warranty? To request service under this warranty for your Embertec Emberplug, (i) visit www.embertec.us for our warranty service address or a list of authorized service providers near you, and (ii) either pack the product carefully to prevent damage in transit and ship it, along with a brief description of the defect, to our warranty service address, or bring it into one of our authorized service providers.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

LIMITED $20,000 CONNECTED EQUIPMENT WARRANTY

What is covered? Except as limited here, this connected equipment warranty covers any equipment that is damaged by a transient voltage surge or spike (an "Occurrence") while properly connected to an Embertec Emberplug that is properly connected to an AC power line with a protective ground. If the initial purchase of the Embertec Emberplug is by a utility or other entity that will not itself be using the device, this warranty is transferable to any customer of such entity who subsequently owns the device. Otherwise, this warranty is not transferable.

For how long? This warranty runs for one year from the date of purchase of the Embertec Emberplug.

What will we do if connected equipment is damaged during the limited connected equipment warranty period and this warranty applies? Subject to the limitations set forth in this warranty, we will elect (at our option) to repair or replace any equipment damaged by an Occurrence, or to pay you an amount equal to the replacement value for such equipment, not to exceed the overall maximum set forth below. In connection with the foregoing, we reserve the right to examine the damaged equipment at the site where the damage occurred. If we elect to replace the equipment

and it has been discontinued, we will replace it with similar equipment of equal or greater value, subject to the overall maximum set forth below. We will pay for all shipping costs incurred in connection with the delivery of any repaired or replacement equipment to you, subject to the overall maximum set forth below.

What does this limited connected equipment warranty not cover?

This limited connected equipment warranty does not cover:

- Any damage to connected equipment caused by improper use of the Embertec Emberplug or the connected equipment, accidents, acts of God (such as lightning strikes, floods or earthquakes), or normal wear and tear of the Embertec Emberplug or the connected equipment. For purposes of this warranty, "improper use" means not installing or operating the Embertec Emberplug in accordance with the manual, or not installing or operating the connected equipment in accordance with its manual.
- Any damage to equipment that is not properly connected to an Embertec Emberplug, or damage to equipment connected to an Embertec Emberplug that is not properly connected to an AC power line with a protective ground.
- Any damage to equipment connected to an Embertec Emberplug that had previously experienced another Occurrence. After each Occurrence, the Embertec Emberplug must be replaced.
- Any damaged equipment that has been disposed before we have examined the equipment at the site where the damage occurred (or notified you that we would not be visiting the site), and elected whether to repair or replace it or pay for its replacement value, all in accordance with the terms set forth above.
- Any damage to satellite dishes.

THE MAXIMUM CUMULATIVE AMOUNT WE WILL PAY FOR ALL REPAIRS, REPLACEMENT AND SHIPPING COSTS FOR ANY AND ALL DAMAGED EQUIPMENT QUALIFYING UNDER THIS WARRANTY SHALL NOT EXCEED TWENTY THOUSAND DOLLARS ($20,000).

Any incidental, consequential, special or other indirect damages are not recoverable under this warranty. Some states do not allow the exclusion of incidental or consequential damages, so the foregoing limitation may not apply to you.

If the connected equipment is covered an applicable homeowner's or renter's insurance policy, we reserve the right to be subrogated under such policy. In addition, this warranty shall not apply to any damaged equipment covered under the manufacturer's warranty.

How do you file a claim under this limited connected equipment warranty? To file a claim for connected equipment qualifying under this warranty, visit www.embertec.us or call (831)708-2621 and provide a full description of the damage.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Please register your Embertec Emberplug with us at www.embertec.us. Product registration is not a condition to coverage under either our limited product warranty or our limited connected equipment warranty.

Also in our range:

Automatic maximum power savings, zero effort for computers and IT peripheral devices. Check with your utility company or visit us on the web for more information.

For further assistance please contact us on customerservice@embertec.us

Embertec USA LLC
7960 B Soquel Drive #389
Aptos, CA 95003
Telephone: 831-708-2621
Website: www.embertec.us
E-mail: customerservice@embertec.us

embertec™ EMPOWERED

embertec™ ENERGY EFFICIENCY TECHNOLOGIES

Due to continual improvement in design or otherwise, the product you purchase may differ slightly from the illustration in this book. Issue V1

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